

## **Remarks**

### **Status of the Application**

Claims 42-79 are pending with the entry of this amendment, with cancellation of originally filed claims 1-41 and 80-85 respectfully requested.

### **The Amendments**

The amendments to claims 42 and 59 do not add new matter to the application as originally filed. For example, the new claims find support in the originally filed application at pages 14-16.

### **The 35 USC § 102 Rejections**

Claims 42, 48-51, 59-61 and 79 stand rejected under 35 USC § 102(b) as allegedly being anticipated by Hitzman (US Patent No. 4,519,984). Although claim 62 is not explicitly included in the statement of the rejection, it is included in the discussion so Applicants respond as though claim 62 were also rejected under this ground.

Applicants have amended independent claims 42 and 59 to include additional claim limitations reciting that the fermenting is done using a fermentor head that includes:

- (1) a dispensing plate that comprises a top portion and a bottom portion, wherein the bottom portion and the top portion are joined together such that a hollow space exists between the top portion and the bottom portion;
- (2) an array of sample vessel areas located in a bottom surface of the bottom portion, which sample vessel areas each comprise a recess and are positioned to correspond to associated with the sample vessels;
- (3) an array of cannulas that are in fluid communication with the hollow space and protrude from a bottom surface of the dispensing plate through the sample vessel areas, wherein at least one cannula of the array of cannulas extends into a liquid in a sample vessel when the sample vessel is positioned in a sample vessel area through which the cannula protrudes; and

(4) a gas inlet in fluid communication with the hollow space for delivering gas into the sample vessels via the cannulas during fermentation.

The newly added claim limitations are essentially those included in the claims of Applicants' US Patent No. 6,723,555.

Hitzman does not describe a method of fermenting that involves the use of a fermentor head as recited in Applicants' amended claim 42 and 59. Therefore, the amended claims are not anticipated by Hitzman. The remaining rejected claims each depend from claim 42 or 59, so those claims are likewise not anticipated by Hitzman. Therefore, the amendments to claims 42 and 59 obviate this ground of rejection. It should be noted that Applicants do not acquiesce as to the appropriateness of the rejections, but have amended the claims to expedite prosecution and reserve the right to pursue the originally claimed subject matter in one or continuing applications.

Claims 42, 44-51, 53-56, 59-61 and 63 stand rejected under 35 USC § 102(b) as allegedly being anticipated by Arad (US Patent No. 5,534,417). Although claim 62 is not explicitly included in the statement of the rejection, it is included in the discussion so Applicants respond as though claim 62 were also rejected under this ground.

As discussed above, Applicants have amended claims 42 and 59 to recite that the claimed methods involve the use of a fermentor head having specified components. Arad does not describe a fermentation method in which such a fermentor head is used, so the claims as amended are not anticipated by Arad. Nor are the remaining rejected claims, which all depend from either claim 42 or claim 59, anticipated by Arad.

### **The 35 USC § 103 Rejections**

Claims 43, 64-67, 77 and 78 stand rejected under 35 USC § 103(a) as allegedly being unpatentable over either Hitzman (US Patent No. 4,519,984) or Arad (US Patent No. 5,534,417) each as applied to claims 42 and 59 above. Each of the rejected claims depends from claim 42 or 59 which, as discussed above, are amended to recited that the claimed method is performed using a fermentor head that includes the components set forth above. Neither Hitzman

nor Arad teaches or suggests a method in which a fermentor head as specified in the amended claims is used. Therefore, the amendments to claims 42 and 59 obviate this ground of rejection.

Claims 52, 57, 58 and 68-76 stand rejected under 35 USC § 103(a) as allegedly being unpatentable over Hitzman as applied to claims 42 and 59, and further in view of Powell (US Patent No. 6,066,497). Each of the rejected claims depends from claim 42 or 59 which, as discussed above, are amended to recited that the claimed method is performed using a fermentor head that includes the components set forth above. Neither Hitzman nor Arad teaches or suggests a method in which a fermentor head as specified in the amended claims is used. Powell likewise does not provide any teaching or suggestion of such a method. Therefore, the amendments to claims 42 and 59 obviate this ground of rejection.

### **Conclusion**

In view of the foregoing, Applicant believes all claims now pending in this Application are in condition for examination. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned attorney at 858-812-1547.

Respectfully submitted,

/ Timothy L. Smith, Reg. No. 35,367 /

Timothy L. Smith, J.D., Ph.D.  
Reg. No. 35,367

GENOMICS INSTITUTE OF THE NOVARTIS RESEARCH FOUNDATION  
10675 John Jay Hopkins Drive, Suite E225  
San Diego, CA 92121  
Tel: (858) 812-1547  
Fax: (858) 812-1981